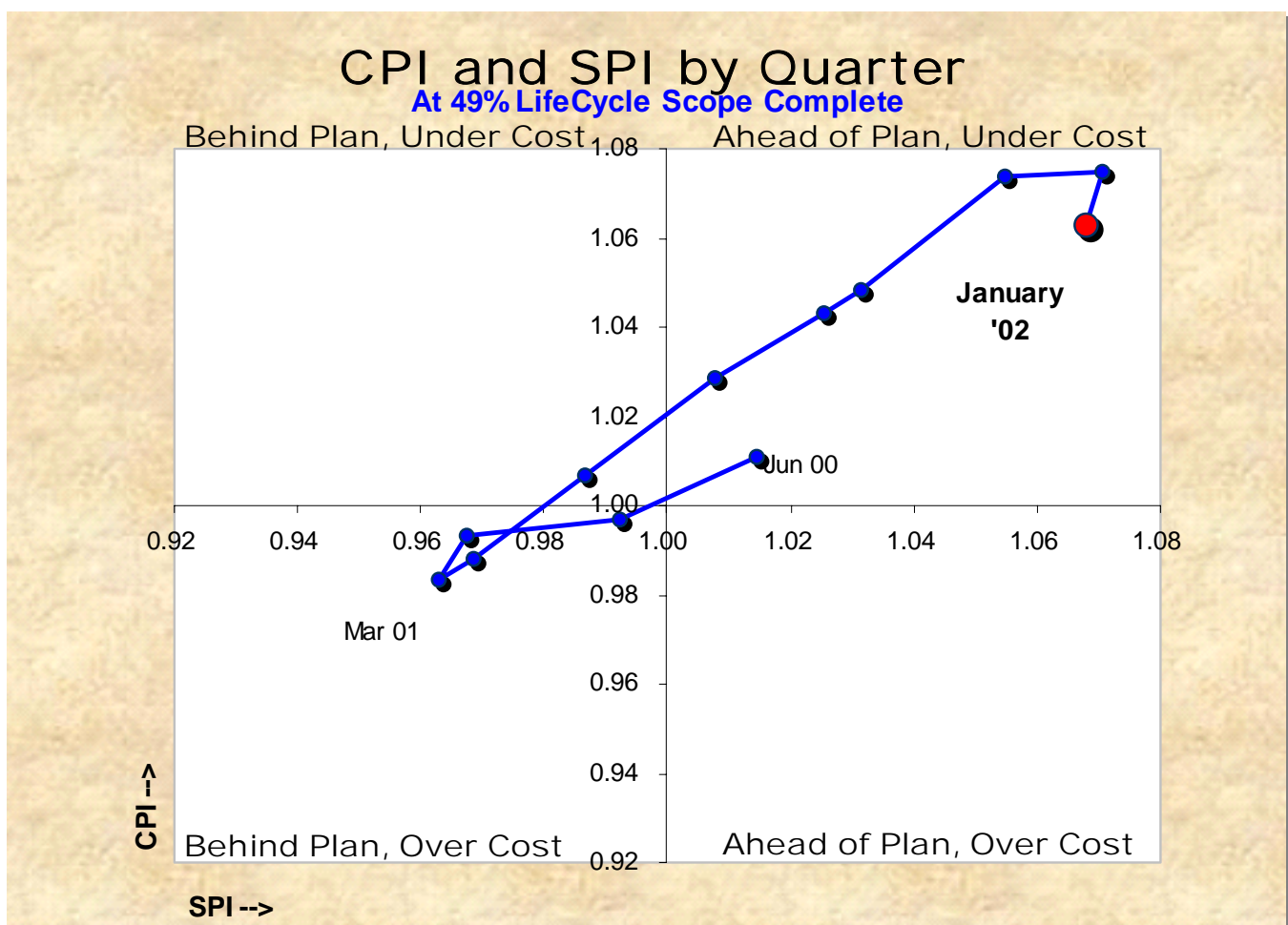


# ROCKY FLATS

## Monthly Project Report

FY03

January, 2003



# Monthly Project Report Rocky Flats

January 2003

## Executive Overview

**In General:** In an effort to reduce their spend rate to be consistent with contractual funding levels, the contractor implemented a recovery plan in January to reduce the workforce and curtail the use overtime. K-H continues to complete work activities below estimated cost and ahead of schedule as they have for the previous sixteen months. K-H continues its emphasis on working safely and maintaining compliance with procedures to ensure safe operations.

**Key Accomplishments:** D&D activities remain on or ahead of schedule with work progressing in the nuclear buildings and on the south side of the Industrial Area. Twenty structures and facilities including tanks, trailers, tents and small buildings were demolished during January. The Waste program shipped 290m<sup>3</sup> of TRU, 2,261m<sup>3</sup> of Low Level Waste, and 1,480m<sup>3</sup> of Low Level Mixed Waste. The Environmental Remediation program completed excavation, sampling, and backfill activities for 15 cells at the 903 Pad Project, and approval has been received from the CDPHE for Sampling and Analysis Plans for six IHSS Groups.

METRIC	
<b>Safety:</b>	During January, 2003, there were 75 site-wide safety events, including three events of "Significant Concern" (Level 3). <i>See page 2</i>
<b>Bears Watching</b>	No Site Noncompliance Tracking Reports were submitted for the month of December.
<b>Cost Variance:</b>	<b>Cumulative Cost Variance</b> = +6%, +\$115M out of ~\$1,943M BCWP <sub>CUM</sub>
<b>On Plan</b>	LIFECYCLE: 49% of target scope completed; 46% of target cost expended.
<b>Schedule Variance:</b>	<b>Predetermined Work Activities SV</b> = +50%, +\$78M
<b>On Plan</b>	LIFECYCLE: 14% of scope scheduled; 21% of scope completed.
	<b>Traditional Schedule Variance</b> = +7%, +\$124M
	LIFECYCLE: 46% of scope scheduled; 49% of scope completed.
<b>Critical Path</b>	<b>CP</b> = <u>SNM activities, B371 D&amp;D</u> <b>Estimated Completion Date:</b> <u>December 15, 2006</u>
<b>Completion Date: On Plan</b>	The critical path has remained stable for four months. The contractor continues to examine critical path activities for acceleration opportunities. RFFO is continuing to use the original Target Date, December 15, 2006, as the ECD.
<b>Current CP: On Plan</b> <i>Under review</i>	
<b>Key Milestones</b>	<b>Closure Activities:</b> Trailers 904A, 441A, 334B and 121A, buildings 884, 992 and 910 and tents 10 & 11 were demolished.
<b>DNFSB: On Plan</b>	<b>DNFSB: <i>Pu Metals &amp; Oxides</i></b> – The commitment to complete PuSPS operations was missed in May 2002, and is now on track for October 2003. To mitigate further schedule delays, approximately 970 kilograms of low-purity oxides have been authorized for shipment to the Waste Isolation Pilot Plant; repackaging has commenced and is expected to be complete by July 2003.
<b>RFCA: On Plan</b>	<b>RFCA FY03 Milestones:</b> <i>K-H Reporting.</i> <i>These figures are validated Quarterly by RFFO</i> D&D (\$29.54M): Met for 2003. LLW (\$5.91M): Met for 2003. ER (\$.552M): Met for 2003. TRU (\$.75M): on track for early completion.. 2003 M5 Milestone ( <i>See Glossary</i> ) (\$35.312M): on track for timely completion.
<b>GFS/I</b>	GFS/I requirements are being met and/or are in process except as noted below.
<b>Status: On Plan</b>	Need DOE receiver site for Low Level Mixed Waste Orphans.
<b>Forecast: Bears Watching</b>	

# Monthly Project Report Rocky Flats

January 2003

## Executive Summary

### Contract Status

**TC:** 3.973B (Original: 3.963)

**TF:** \$340.8M (Original: \$340M)

**TCD:** 15 December 2006

### Penalty Assessment

No Fee Penalties were issued in January. To date, four fee penalties have been issued under the terms of this contract with total penalties equaling \$510,000.

### Requests for Equitable Adjustments (REAs):

Changes to the negotiations on the REA for National Emergency costs are pending HQ review. K-H has recalled and is revising the REA submitted at the end October for the shipment of items greater than 1000A2; it will be resubmitted at a later date. The PuSPS Moisture measure REA has been revised to reflect more current costs and changes in cost for implementation since original submission. No REA settlements have been incorporated into the contract this month.

### Pending REA's: ~ \$34.9M

- ~ \$16.5 million: National Emergency (2002 – 2003 Costs)
- ~ \$13 million: WIPP WAC Part III (projected 2002 - 2005 costs)
- ~ \$2.4 million: PuSPS Moisture measurement
- ~ \$3+ million in these miscellaneous REAs: - System Engineers/B371 VSS - NTS Waste Acceptance Criteria - PuSPS outside SRS Requirement - Beryllium Monitoring



### Safety

### 3 Events of “Significant Concern” or Above

During January, 2003, there were 75 site-wide safety events, including three events of “Significant Concern” (Level 3). There were no events above Level 3.

The Level 3 events:

- 1) 903 Pad: An employee at the 903 pad was almost hit by a fork truck, but another employee pushed him out of the way.
- 2) T130E: An employee was walking toward the southeast corner of the trailer where there is a gap between the roadway and the trailer. A vehicle avoided the stop sign by using this gap and the employee had to take evasive action to avoid being struck.
- 3) B777: An employee was struck in the head by a piece of metal during D&D activities in room 430.



### Critical Path

The critical path includes preparation / packaging of composites followed by B371 D&D and site grading. During September, the contractor re-sequenced the B371 D&D activities to accelerate the estimated Project completion date by several months. RFFO is monitoring the efficacy of the new critical path and near critical path activities and for the foreseeable future will continue to utilize December 15, 2006 as the estimated completion date.



### GFS/I Performance

Most GFS/I requirements have been met. Remaining approvals to use the 9975 and DT-22 containers for select materials are in process. The key issue is the identification of disposal site(s) for 10 to 100nCi/g LLMW.

# Monthly Project Report Rocky Flats

January 2003

## Cost Performance



### Cost

*LIFECYCLE: 49% of scope completed; 46% of target cost expended*

Cost Variance +6%, +\$115M

Cost Variance for target activities declined this month by \$16.5M; down from 131.5M and 7% in December. While this represents the largest single month decrease in cost variance since the beginning of the contract, it is similar to the what was seen in the first month of last quarter ( a -\$7.5M decrease), when most of the PBDs experienced a decrease in their cost variance performance compared to the previous month. The Cost Variance on the Project remains significantly positive, with over \$115 million in cost savings accumulated since the beginning of the contract.

These decreases at the beginning of a quarter are mainly due to a significant push at the end of the previous quarter to complete work activities and take the earned value, while the cost accruals may lag into the following month. Additionally, some of the cumulative variance is being reduced by higher costs for certain D&D work than what was baselined. The variance reductions are focused in eight Cost Accounts, and will continue to be monitored.

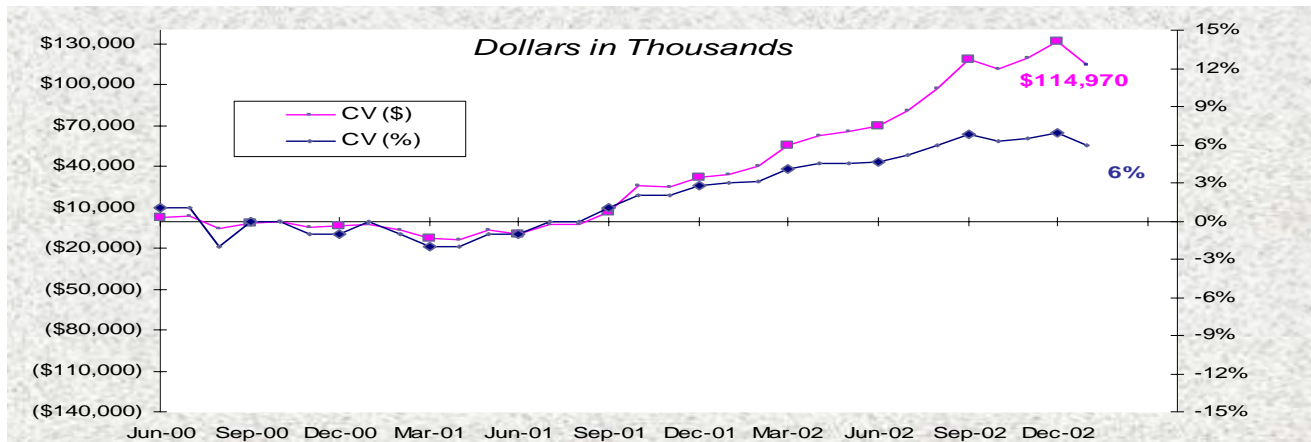
The positive cost variances are concentrated in: PBD E, Industrial and Site Services Project (\$61M); PBD G, the Environmental Remediation Project (\$22M), and in the level-of-effort activities in PBD J, Support Project (\$37M). These are offset by the negative cost variances in PBD A, Building 371 Closure Project (\$-30M) and lesser values in PBDs B and C. Until SNM packaging and removal is completed, the B371 Closure Project's negative cost variance will continue to increase. Activities in Building 371 (PBD A) dominate the critical path.

### Cost Performance by PBD\*:

Project Description	BCWP	ACWP	CV (\$)	CV (%)
1A 371 Complex Project	250,508	280,739	(30,231)	-12%
1B 707 Complex Project	148,405	149,833	(1,429)	-1%
1C B771/774 Closure Project	168,152	180,185	(12,033)	-7%
1D B776/777 Closure Project	144,739	133,868	10,871	8%
1E Industrial and Site Services Project	346,873	285,475	61,398	18%
1F Material Stewardship Project	445,735	435,376	10,359	2%
1G Remediation Project	53,544	31,570	21,974	41%
1H Engr., Environ, Safety & Quality Programs	135,687	118,495	17,192	13%
1J Support Project	249,602	212,734	36,868	15%
<b>Project Totals</b>	<b>\$1,943,245</b>	<b>\$1,828,275</b>	<b>\$114,970</b>	<b>6%</b>

\* Includes *all target* fund sources: EW05, FS40, EW02, GG08, NN61 and YN01

### Cumulative Cost Variance Over Time



**NOTE:** Currently, the closure project has accumulated \$16.5M in non-target Site Closure (EW05) and Safeguards and Security (FS40) costs. These non-target costs are generally the result of technical direction and may eventually be considered as part of potential Requests for Equitable Adjustment, and / or will impact cost variance.

# Monthly Project Report Rocky Flats

January 2003

## Schedule Performance

DEFINITIONS OF ROCKY FLATS' SCHEDULE PERFORMANCE INDICATORS HAVE BEEN MOVED TO THE GLOSSARY AT THE BACK OF THIS REPORT.



### Comparative Schedule Performance

The project-level positive schedule variances reflect the contractor's continued success at accelerating workscope. However, the majority of accelerated activities have been in PBDs D, E and G, not on the Critical Path. A comparative review of schedule performance indicators continues to indicate that positive schedule variances in the Building 776 Closure Project (PBD D), the Industrial and Site Services Project (PBD E) and Environmental Remediation (PBD G) mask negative schedule variances in the Building 371 Complex Project (PBD A). K-H is applying cost savings realized in other PBDs to fund schedule reduction in PBD A. It is anticipated that PBD A's schedule variance will continue to improve in the future.

K-H's critical path revisions in September have resulted in some projected early finish dates for the individual Projects. DOE is still reviewing the K-H changes and will utilize December 15, 2006 as the estimated completion date for the Total Project until the review is complete.

Project		SV <sub>TRAD</sub>	SV <sub>PWA</sub> *	SV <sub>MM</sub>	SV <sub>P3</sub> +/- Days
1A	371 Complex Project	-2%	-2%	-6%	109**
1B	707 Complex Project	6%	30%	18%	60
1C	B771/774 Closure Project	3%	22%	6%	33
1D	B776/777 Closure Project	20%	107%	50%	167
1E	Industrial and Site Services Project	21%	189%	87%	165
1F	Material Stewardship Project	2%	46%	8%	122
1G	Environmental Remediation	82%	1299%	92%	109**
Total Project:		7%	50%	25%	109**

\*These are K-H reported values. RFFO validates and reports on PWA performance quarterly, in the Total Project Report

\*\*Under RFFO Review



### P3 Completion

The **K-H generated** Estimated Completion Dates (calculated using P<sup>3</sup> project scheduling software), are represented below.

K-H continues to examine the critical path activities to identify schedule acceleration opportunities. RFFO is monitoring the critical path and for the foreseeable future will continue to utilize December 15, 2006 as the estimated completion date.

PBD	Activity Description	Baseline Early Finish	Statused Early Finish
A	B371	11-Oct-06	19-Apr-06
B	B707	13-Mar-06	06-Dec-05
C	B771/774	18-Aug-04	01-Jul-04
D	B776/777	31-Oct-06	08-Feb-06
E	Industrial Sites	11-Oct-06	23-Jan-06
F	Material Stew.	13-Dec-06	01-Jun-06
G	ER	14-Dec-06	22-Jun-06
Total Project		14-Dec-06	22-Jun-06*

\*Under RFFO Review

# Monthly Project Report Rocky Flats

January 2003

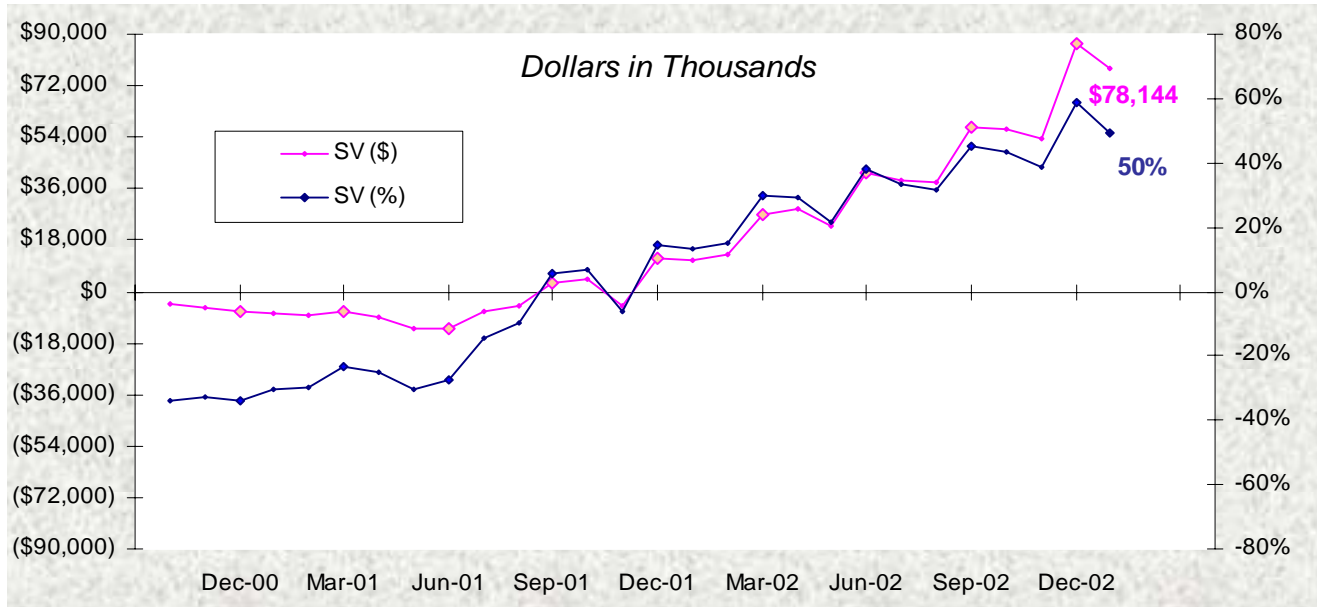


## Predetermined Work Activities

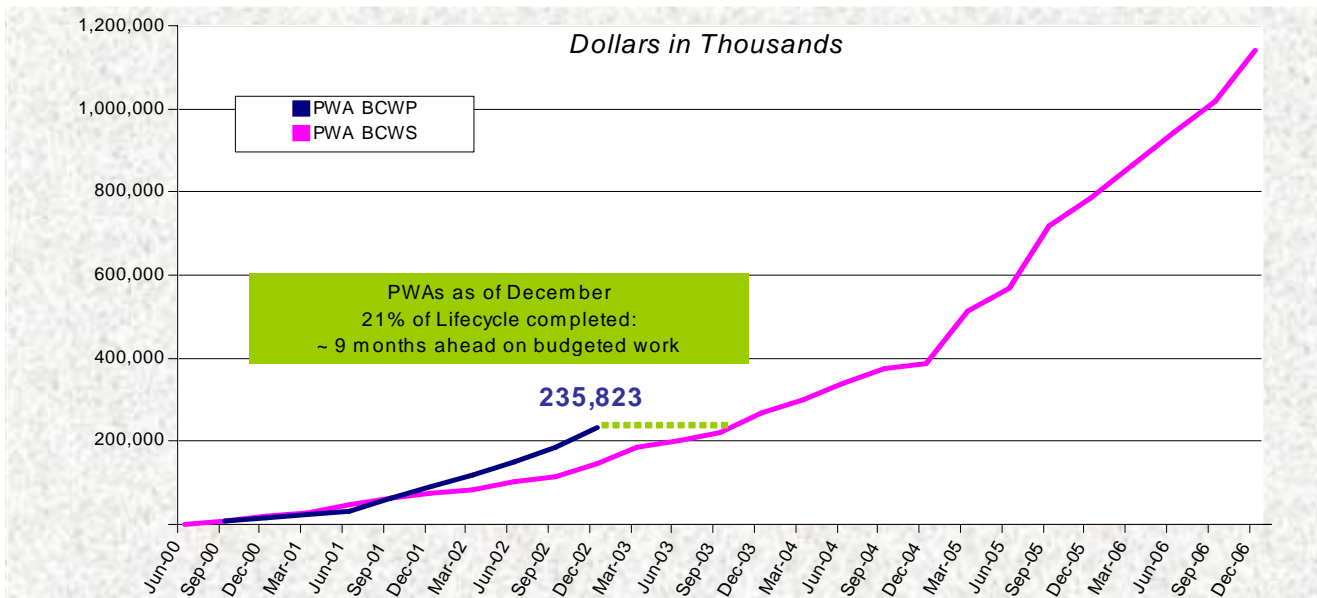
**SV<sub>PWA</sub> (+\$78M, +50%)\***

K-H continues the positive performance on Predetermined Work Activity schedule variance (SV<sub>PWA</sub>) begun in June of 2001. The current BCWS for these activities is \$158M and the lifecycle BCWS for these activities is \$1.145B. At the end of December, 2002, 44% of the contract schedule has elapsed (36 out of 82.5 months), 14% of the PWA scope was scheduled for completion (\$158M), and 21% (\$236M) of the PWA scope is complete. As expected, SV<sub>PWA</sub> performance has declined from +59% (+\$87M) in December to +50% (+\$78M) in January. A negative adjustment is anticipated the first month after the end of a quarter (see "Cost" on page 3). The cumulative dollar variance declined by approximately \$8.6M this month.

\*These are K-H reported values. RFFO validates and reports on PWA performance quarterly, in the Total Project Report



## PWA Schedule: Actual against Baseline Projection





# Monthly Project Report Rocky Flats

January 2003

## Project Metrics

Project Metric	Life Cycle <sup>1</sup> Planned	Actuals to Date	% LC Complete	Actuals for Month	Actuals this FY	FY Plan (CPB) this FY	FY Plan (AWA)
Low Level Waste Disposed (m <sup>3</sup> )	184,475	59,785	32%	2,261	12,245	36,637	37,000
Low Level Mixed Waste Disposed (m <sup>3</sup> )	44,614	7,547	17%	1,480	4,258	3,151	8,700
TRU Waste Disposed (m <sup>3</sup> )	12,355 <sup>2</sup>	5,339	43%	290	1,204	2,065	3,000
Depleted and Other Uranium Dispositioned (Metric Tons)	250	220	88%	10	40	70	70
Certified 3013 Containers Produced	1,950 <sup>3</sup>	1,290	76%	103	306	0	716
B371 Project Work Sets	60	107	18%	0	5	9	14
B707 Project Work Sets	98	44	45%	0	9	17	17
B771 Project Work Sets	106	66	62%	0	4	13	15
B776 Project Work Sets	82	71	87%	0	5	17	13
Facilities Demolished	290 <sup>5</sup>	84	29%	7	16	6	43
Release Sites Assessed	238	144	61%	0	0	21	21
Release Sites Cleaned Up	121	32	26%	0	2	9	9
Gloveboxes removed	1,324	893 <sup>6</sup>	67%	16	139 <sup>6</sup>	306	403

<sup>1</sup> "Life Cycle" based on Closure Project Baseline metrics and New Corporate Performance Measures

<sup>2</sup> Per revised K-H lifecycle estimates

<sup>3</sup> Life cycle estimate changed due to lower bulk density of the Low Purity Oxides – requiring more containers

<sup>4</sup> Starting in FY03 (Oct.'02) this number includes both D&D work sets and areas

<sup>5</sup> Based on current IPABS data, subject to change

<sup>6</sup> Actuals to date (and for this FY) for Gloveboxes Removed have been updated to reflect validations of K-H QCA reporting (Jan. '03)

<sup>7</sup> Revised from previous month based on actual validations for completed work sets

Note: Residue Stabilization Project completed in May 2002; all 104,146 kgs of residues stabilized.

# Key Definitions / Terms

## Rocky Flats' schedule performance indicators:

All indicators (except P3) use the standard formula  $SV = BCWP - BCWS$  and are measured in dollars, not time. Performance is measured against the Life-Cycle Baseline as presented in June 2000 with minimal adjustments approved through our rigorous Change Control Process. The indicators defined below differ mainly in which budgeted costs are included in the analysis.

**Traditional Schedule Variance ( $SV_{TRAD}$ ):** This indicator addresses schedule performance compared to plan for the entire project contracted with Kaiser-Hill. It includes all "Target" costs as defined by the contract (EW05, EW09 (formerly EW02), FS40, GG08, YN01, and NN61). It does NOT include budgeted costs for things like performance fee, technology deployment, and program (RFFO) funds. A positive variance means that, compared to the original plan, more work was accomplished than planned. A negative variance means that less work has been accomplished than planned.

**Modified Milestone Schedule Variance ( $SV_{MM}$ ):** This schedule performance indicator is designed to focus on all the 'real' work at the site. It removes level-of-effort activities from the analysis, but adds the Technology Deployment budget. Again, the variance indicates that more work or less work was accomplished than planned.

**Predetermined Work Activities Schedule Variance ( $SV_{PWA}$ ):** In order to best assure that the government is awarding performance fee for the accomplishment and acceleration of the most important work at Rocky Flats, our contract with Kaiser-Hill includes a list and schedule of ~900 "Predetermined Work Activities" against which performance is measured and provisional fee is paid. Generally,  $SV_{PWA}$  calculations allow for earning value only when an activity is 100% complete (all or none), unless the activity is a quantity-based measure. These activities represent critical work necessary to the timely closure of the Site, and performance is measured against the baseline schedule set out at the beginning of the contract. Although the contractor is free to realign specific work activities as they see fit, the dollar amount of work accomplished against these critical activities is expected to remain on plan to facilitate timely closure of the site.

**Primavera Project Planner Schedule Variance ( $SV_{P3}$ ):** In contrast with the previous indicators, the P3 schedule variance is measured in units of time (days). The Primavera project scheduling software computes the longest (critical) path through the contractual work on the Project and arrives at the Statused Early Finish, (a.k.a. Estimated Completion Date). Variance is measured against the Baseline Early Finish as established in June 2000.

---

**Orphans – Low Level Mixed Waste Orphans.** Wastes which must be removed from the Site but for which no disposal / treatment path has been identified and/or approved.

**D&D – Deactivation and Decommissioning.** Deactivation: the process of placing a "building" in a safe and stable condition. Decommissioning: All activities that occur after deactivation. Includes decontamination and dismantlement /demolition.

**M5 - RFCA Earned Value Aggregate (over 50%) Milestone.** Fiscal Milestones M1 – M4 require that 50% of the FYBCWS in each individual category be completed in that fiscal year. The FY M5 Milestone tracks the dollar value of the remaining BCWS in those categories for the fiscal year and requires that it be completed before the end of the *following* fiscal year. The M5 Earned Value Milestone can be satisfied with any combination of BCWP from LLW, D&D, ER, and TRU. However, the M5 milestone must be completed for each fiscal year before BCWP can be applied to Milestones M1 – M4 in the following year.

---

**PBD A – 371 Complex Project.** Liquid waste ops, Plutonium Stabilization & Packaging System (PuSPS), repackaging of residues, SNM removal (including shipping), and D&D. Building demolition by October 11, 2006.

**PBD B – 707 Complex Project.** SNM holdup removal, consolidation of SNM into B371, classified matter removal, and D&D. Building demolition by 3/1/06.

**PBD C – 771 Complex Project.** Complex D&D and D&D Programs (site decommissioning program and EM-50 funded projects). Building demolition by 8/04/04.

**PBD D – 776 Complex Project.** D&D. Building demolition by 10/27/05. Removal of the slab/foundation by 4/26/06 and project completion by 10/31/06.

**PBD E – Industrial / Site Services Project.** The industrial and site services portion of the RISS Project, and other bldg D&D.

**PBD F – Material Stewardship Project.** Technical program direction and operational support for commodities, engineered services, procurement, traffic & transportation, and disposition of waste.

**PBD G – Remediation Project.** The Environmental Restoration (ER) Program portion of the RISS project. The overall scope includes Industrial Area and Buffer Zone Closure and environmental restoration including any remaining characterization.

**PBD H – Engineering, Environmental, Safety, Quality, and Health.** Infrastructure. Includes; project management, assessment, oversight, regulatory compliance and monitoring, waste certification, technical training, Nuclear Safety and Licensing, Criticality Safety, Fire Protection, Engineering, Safety/Work Control, and Radiological Protection.

**PBD J – Support Project.** General Counsel & Audit (GC&A), Strategic Planning & Integration, Administration, and the K-H Executive Office.